Vertigo morsei (Six-whorl Vertigo)

Report Date: January 13, 2016

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Gastropoda (Aquatic And Terrestrial Snails)

Order: Stylommatophora (Air-breathing Snails Land Snails)

Family: Pupillidae (Land Snails)

General comments:

One EO despite some survey effort (Coles 2002, Nekola 2007); obligate of hypercalcareous wetlands (rare in ME with obvious potential habitat already surveyed – e.g., marl fens); declines and restrictions in range elsewhere

Species Conservation Range Maps for Six-whorl Vertigo:

Town Map: <u>Vertigo morsei_Towns.pdf</u>
Subwatershed Map: <u>Vertigo morsei_HUC12.pdf</u>

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation:

Maine Status: Endangered

State Special Concern or NMFS Species of Concern: NA

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority: NA

High Climate Change Vulnerability:

Vulnerability: 3, Confidence: Medium, Reviewers: Decided in Workshop (W)

Understudied rare taxa:

Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. *criteria only qualifies for Priority 3 level SGCN*

Notes:

Historical: NA

Culturally Significant: NA Professional Discretion:

Current criteria ranked *Vertigo morsei* as SGCN priority 2, however, species should qualify as SGCN priority 1 based on professional discretion.

Justification: One EO despite some survey effort; obligate of hypercalcareous wetlands (rare in ME with obvious potential habitat already surveyed – e.g., marl fens); declines and restrictions in range elsewhere

Habitats Assigned to Six-whorl Vertigo:

Formation Name Peatland

Macrogroup Name Northern Peatland & Fens

Habitat System Name: Laurentian-Acadian Alkaline Fen **Primary Habitat** Notes: primary, known in ME from a single marl flat in fen

Stressors Assigned to Six-whorl Vertigo:

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

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IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity Actionability: Highly actionable

Notes: Lack of comprehensive survey and monitoring effort to understand population status & trends and ID additional

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occurrences

IUCN Level 1 Threat Natural Systems Modifications

IUCN Level 2 Threat: Dams and Water Management-Use

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: Alteration of hydrology at the single site in state for this snail is the single biggest possible threat. The site is

protected but activity immediately offsite could compromise the wetland hyrology and quality.

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: Moderate Severity **Actionability:** Actionable with difficulty

Notes: Impacts of climate change to habitat could become a concern for a specialist that is primarily found in much

cooler regions.

Species Level Conservation Actions Assigned to Six-whorl Vertigo:

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Guild Level Conservation Actions:

This Species is currently not attributed to a guild.

Broad Taxonomic Group Conservation Actions:

Relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.